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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/039,621	10/24/2001	Brig Barnum Elliott	01-4034	2499
28120	7590	08/01/2006	EXAMINER	
FISH & NEAVE IP GROUP ROPES & GRAY LLP ONE INTERNATIONAL PLACE BOSTON, MA 02110-2624			SAM, PHIRIN	
			ART UNIT	PAPER NUMBER
			2616	

DATE MAILED: 08/01/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

5/

Office Action Summary	Application No.		Applicant(s)	
	10/039,621		ELLIOTT, BRIG BARNUM	
	Examiner		Art Unit	
	Phirin Sam		2616	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 24 May 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-4, 8-28, 30-32, 35-39, 41-43 and 45-57 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-4, 9, 11-16, 19-24, 26-28, 38, 39 and 48-57 is/are rejected.
- 7) ☒ Claim(s) 8, 10, 17, 18, 25, 30-32, 35-37, 41-43 and 45-47 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

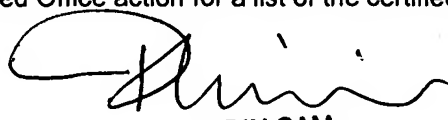
Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 24 October 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.



**PHIRIN SAM
PRIMARY EXAMINER**

Attachment(s)

- | | |
|---|--|
| <p>1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)</p> <p>2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)</p> <p>3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____</p> | <p>4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____</p> <p>5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)</p> <p>6) <input type="checkbox"/> Other: _____</p> |
|---|--|

DETAILED ACTION

Claim Objections

1. Claims 8-10, 30-32, 35, 37, 41-43, 45, and 46 are objected to because of the following informalities:

Claims 8, 9, 30, 32, 35, 37, 41, 43, and 45 are objected because they depend on the cancelled claims. Therefore, the appropriate corrections are required.

Claims 10, 31, 42, and 46 are objected as they depend on the objected claims.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-4, 9, 11-16, 19-24, 26-28, 38, 39, 48, and 49-57 are rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent 7,006,472 (hereinafter referred as "Immonen") in view of US Patent 6,657,991 (hereinafter referred as "Akgun").

Regarding amended claims 1, 15, 26, 38, 49, and claims 52, 54, Immonen discloses a programmable radio comprising:

(a) at least two functional modules, the at least two functional modules executing programmed instructions to provide respective functional aspects of the radio (see Figs. 1, 4, 7, and 8, 12, col. 5, lines 30-35);

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(b) an internal network connecting the at least two functional modules, communications between the at least two functional modules over the internal network conforming to packet network protocols (see Fig. 4, col. 5, lines 30-35);

(c) wherein the packet network protocols are chosen from a category of packet network protocols consisting of a User Datagram Protocol, a Transmission Control Protocol, a RealTime Protocols, a Dynamic Host Configuration Protocol, a File Transfer Protocol, a Simple Network Management Protocol and a Domain Name System (see Figs. 1, 2, 7, and 15, col. 5, lines 60-66, col. 6, lines 43-45, col. 14, lines 24-30, col. 24, lines 54-67, and col. 24, lines 1-15, and col. 31, lines 44-50);

Immonen does not disclose a Bootstrap Protocol and Trivial File Transfer Protocol. However, Akgun discloses a Bootstrap Protocol and Trivial File Transfer Protocol (see Fig. 5, col. 9, lines 1-17, col. 13, lines 36-54). At the time of the invention, it would have been obvious to a person of ordinary skill in the art to combine a Bootstrap Protocol and Trivial File Transfer Protocol teaching by Akgun with Immonen. The motivation for doing so would have been to provide for supporting network management functions read on column 9, line 5. Therefore, it would have been obvious to combine Akgun and Immonen to obtain the invention as specified in the claims 1, 26, 38, 49, and 54.

Regarding claims 2, 14, 19, 27, 39, 50, 53, and 55, Immonen discloses the internal network is chosen from a category of networks consisting of an Ethernet work, an ATM network, a token ring network and a resilient packet ring network (see Figs. 1 and 3, element CORE NETWORKS, col. 6, lines 5-13).

Regarding claims 3, 28, 51, and 56, Immonen discloses the packet network protocols are chosen from a category of packet network protocols consisting of an Internet protocol suite and a set of network standards conforming to IEEE 802 (see Fig. 8, col. 7, lines 30-53).

Regarding claim 4, Immonen discloses the Internet protocol suite is chosen from a category of Internet protocol versions consisting of an Internet protocol version 4 and an Internet protocol version 6 (see col. 1, lines 11-29).

Regarding claims 9 and 16, Immonen discloses the packet network protocols facilitate conveying real time streaming media between modules (see Fig. 2, col. 5, lines 60-66).

Regarding claims 11 and 12, Immonen discloses a network bus, at least two functional modules having a connection to the network bus (see Fig. 3, col. 6, lines 38-58).

Regarding claim 13, Immonen does not disclose the internal network further comprises a central hub located within at least one of at least two functional modules, other modules connected to the central hub. However, Akgun discloses the central hub (see Fig. 1, col. 6, lines 52-61). At the time of the invention, it would have been obvious to a person of ordinary skill in the art to combine the central hub teaching by Akgun with Immonen. The motivation for doing so would have been to provide (motivation xxx). Therefore, it would have been obvious to combine Akgun and Immonen to obtain the invention as specified in the claim 13.

Regarding claims 20-24, 48, and 57, Immonen discloses the network assigns addresses to at least two functional modules (see col. 29, lines 50-67, col. 30, lines 1-9, col. 32, lines 2-17).

Allowable Subject Matter

4. Claims 8, 10, 17, 18, 25, 30-32, 35-37, 41-43, and 45-47 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

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Conclusion

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Phirin Sam whose telephone number is (571) 272-3082. The examiner can normally be reached on a compress schedule, from 8:00-5:30, first Wed off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wellington Chin can be reached on (571) 272 - 3134. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Respectfully submitted,

Date: July 27, 2006

A handwritten signature in black ink, appearing to read 'Phirin', written over a horizontal line.

**PHIRIN SAM
PRIMARY EXAMINER**